

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

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Tel: (330)497-9396

TestAmerica Job ID: 240-52645-1

Client Project/Site: EMD Monthly O&M

For:

TRC Environmental Corp-Payne Firm

11231 Cornell Park Drive

Cincinnati, Ohio 45242

Attn: Curt Kugler



Authorized for release by:

7/8/2015 8:17:48 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Job ID: 240-52645-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: TRC Environmental Corp-Payne Firm

Project: EMD Monthly O&M

Report Number: 240-52645-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/30/2015 8:50 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample INFLUENT/062915 (240-52645-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 07/07/2015.

Acetone was detected in method blank MB 240-188119/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for 188119 recovered outside control limits for the following analyte: Trichlorofluoromethane. This analyte has been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis on the following sample was not performed: INFLUENT/062915 (240-52645-1).

Sample INFLUENT/062915 (240-52645-1)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-52645-1	INFLUENT/062915	Water	06/24/15 13:30	06/30/15 08:50

Detection Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Client Sample ID: INFLUENT/062915

Lab Sample ID: 240-52645-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	50		50	11	ug/L	50		8260B	Total/NA
1,1-Dichloroethane	60		50	15	ug/L	50		8260B	Total/NA
1,2-Dichloroethane	550		50	12	ug/L	50		8260B	Total/NA
1,2-Dichloroethene, Total	1100		100	10	ug/L	50		8260B	Total/NA
Acetone	290	J B	500	47	ug/L	50		8260B	Total/NA
Benzene	570		50	18	ug/L	50		8260B	Total/NA
Chlorobenzene	40	J	50	13	ug/L	50		8260B	Total/NA
Chloroform	560		50	13	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	1000		50	13	ug/L	50		8260B	Total/NA
Ethylbenzene	130		50	13	ug/L	50		8260B	Total/NA
Methylene Chloride	480		50	17	ug/L	50		8260B	Total/NA
Tetrachloroethene	27	J	50	16	ug/L	50		8260B	Total/NA
Toluene	500		50	12	ug/L	50		8260B	Total/NA
trans-1,2-Dichloroethene	80		50	15	ug/L	50		8260B	Total/NA
Trichloroethene	110		50	11	ug/L	50		8260B	Total/NA
Vinyl chloride	250		50	15	ug/L	50		8260B	Total/NA
Xylenes, Total	260		100	26	ug/L	50		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Client Sample ID: INFLUENT/062915

Lab Sample ID: 240-52645-1

Date Collected: 06/24/15 13:30

Matrix: Water

Date Received: 06/30/15 08:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	14	ug/L			07/07/15 12:41	50
1,1,1-Trichloroethane	ND		50	22	ug/L			07/07/15 12:41	50
1,1,2,2-Tetrachloroethane	50		50	11	ug/L			07/07/15 12:41	50
1,1,2-Trichloroethane	ND		50	12	ug/L			07/07/15 12:41	50
1,1-Dichloroethane	60		50	15	ug/L			07/07/15 12:41	50
1,1-Dichloroethene	ND		50	23	ug/L			07/07/15 12:41	50
1,2,3-Trichloropropane	ND		50	22	ug/L			07/07/15 12:41	50
1,2-Dibromo-3-Chloropropane	ND		100	41	ug/L			07/07/15 12:41	50
1,2-Dichloroethane	550		50	12	ug/L			07/07/15 12:41	50
1,2-Dichloroethene, Total	1100		100	10	ug/L			07/07/15 12:41	50
1,2-Dichloropropane	ND		50	13	ug/L			07/07/15 12:41	50
1,4-Dioxane	ND		2500	2000	ug/L			07/07/15 12:41	50
2-Butanone	ND		500	27	ug/L			07/07/15 12:41	50
2-Hexanone	ND		500	24	ug/L			07/07/15 12:41	50
3-Chloro-1-propene	ND		100	42	ug/L			07/07/15 12:41	50
4-Methyl-2-pentanone (MIBK)	ND		500	50	ug/L			07/07/15 12:41	50
Acetone	290	J B	500	47	ug/L			07/07/15 12:41	50
Acetonitrile	ND		1000	200	ug/L			07/07/15 12:41	50
Acrolein	ND		1000	230	ug/L			07/07/15 12:41	50
Acrylonitrile	ND		1000	320	ug/L			07/07/15 12:41	50
Benzene	570		50	18	ug/L			07/07/15 12:41	50
Bromodichloromethane	ND		50	15	ug/L			07/07/15 12:41	50
Bromoform	ND		50	28	ug/L			07/07/15 12:41	50
Bromomethane	ND		50	22	ug/L			07/07/15 12:41	50
Carbon disulfide	ND		50	19	ug/L			07/07/15 12:41	50
Carbon tetrachloride	ND		50	22	ug/L			07/07/15 12:41	50
Chlorobenzene	40	J	50	13	ug/L			07/07/15 12:41	50
Chloroethane	ND		50	16	ug/L			07/07/15 12:41	50
Chloroform	560		50	13	ug/L			07/07/15 12:41	50
Chloromethane	ND		50	22	ug/L			07/07/15 12:41	50
Chloroprene	ND		100	13	ug/L			07/07/15 12:41	50
cis-1,2-Dichloroethene	1000		50	13	ug/L			07/07/15 12:41	50
cis-1,3-Dichloropropene	ND		50	23	ug/L			07/07/15 12:41	50
Dibromochloromethane	ND		50	22	ug/L			07/07/15 12:41	50
Dibromomethane	ND		50	21	ug/L			07/07/15 12:41	50
Dichlorodifluoromethane	ND		50	16	ug/L			07/07/15 12:41	50
Ethyl methacrylate	ND		50	22	ug/L			07/07/15 12:41	50
Ethylbenzene	130		50	13	ug/L			07/07/15 12:41	50
Ethylene Dibromide	ND		50	16	ug/L			07/07/15 12:41	50
Iodomethane	ND		50	21	ug/L			07/07/15 12:41	50
Isobutanol	ND		2500	600	ug/L			07/07/15 12:41	50
Methacrylonitrile	ND		500	130	ug/L			07/07/15 12:41	50
Methyl methacrylate	ND		100	14	ug/L			07/07/15 12:41	50
Methylene Chloride	480		50	17	ug/L			07/07/15 12:41	50
Propionitrile	ND		500	100	ug/L			07/07/15 12:41	50
Styrene	ND		50	23	ug/L			07/07/15 12:41	50
Tetrachloroethene	27	J	50	16	ug/L			07/07/15 12:41	50
Toluene	500		50	12	ug/L			07/07/15 12:41	50
trans-1,2-Dichloroethene	80		50	15	ug/L			07/07/15 12:41	50

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Client Sample Results

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Client Sample ID: INFLUENT/062915

Lab Sample ID: 240-52645-1

Date Collected: 06/24/15 13:30

Matrix: Water

Date Received: 06/30/15 08:50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		50	28	ug/L			07/07/15 12:41	50
trans-1,4-Dichloro-2-butene	ND		50	28	ug/L			07/07/15 12:41	50
Trichloroethene	110		50	11	ug/L			07/07/15 12:41	50
Trichlorofluoromethane	ND *		50	25	ug/L			07/07/15 12:41	50
Vinyl acetate	ND		100	21	ug/L			07/07/15 12:41	50
Vinyl chloride	250		50	15	ug/L			07/07/15 12:41	50
Xylenes, Total	260		100	26	ug/L			07/07/15 12:41	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		78 - 125		07/07/15 12:41	50
4-Bromofluorobenzene (Surr)	90		61 - 120		07/07/15 12:41	50
Dibromofluoromethane (Surr)	90		79 - 120		07/07/15 12:41	50
Toluene-d8 (Surr)	103		80 - 120		07/07/15 12:41	50

Surrogate Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (78-125)	BFB (61-120)	DBFM (79-120)	TOL (80-120)
240-52645-1	INFLUENT/062915	90	90	90	103
LCS 240-188119/4	Lab Control Sample	92	97	95	111
MB 240-188119/6	Method Blank	96	95	93	108

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-188119/6

Matrix: Water

Analysis Batch: 188119

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.28	ug/L			07/07/15 11:10	1
1,1,1-Trichloroethane	ND		1.0	0.44	ug/L			07/07/15 11:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.22	ug/L			07/07/15 11:10	1
1,1,2-Trichloroethane	ND		1.0	0.24	ug/L			07/07/15 11:10	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			07/07/15 11:10	1
1,1-Dichloroethene	ND		1.0	0.45	ug/L			07/07/15 11:10	1
1,2,3-Trichloropropane	ND		1.0	0.44	ug/L			07/07/15 11:10	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.82	ug/L			07/07/15 11:10	1
1,2-Dichloroethane	ND		1.0	0.23	ug/L			07/07/15 11:10	1
1,2-Dichloroethene, Total	ND		2.0	0.20	ug/L			07/07/15 11:10	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			07/07/15 11:10	1
1,4-Dioxane	ND		50	40	ug/L			07/07/15 11:10	1
2-Butanone	ND		10	0.53	ug/L			07/07/15 11:10	1
2-Hexanone	ND		10	0.48	ug/L			07/07/15 11:10	1
3-Chloro-1-propene	ND		2.0	0.84	ug/L			07/07/15 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.99	ug/L			07/07/15 11:10	1
Acetone	2.15	J	10	0.94	ug/L			07/07/15 11:10	1
Acetonitrile	ND		20	4.0	ug/L			07/07/15 11:10	1
Acrolein	ND		20	4.5	ug/L			07/07/15 11:10	1
Acrylonitrile	ND		20	6.3	ug/L			07/07/15 11:10	1
Benzene	ND		1.0	0.35	ug/L			07/07/15 11:10	1
Bromodichloromethane	ND		1.0	0.29	ug/L			07/07/15 11:10	1
Bromoform	ND		1.0	0.56	ug/L			07/07/15 11:10	1
Bromomethane	ND		1.0	0.44	ug/L			07/07/15 11:10	1
Carbon disulfide	ND		1.0	0.38	ug/L			07/07/15 11:10	1
Carbon tetrachloride	ND		1.0	0.43	ug/L			07/07/15 11:10	1
Chlorobenzene	ND		1.0	0.25	ug/L			07/07/15 11:10	1
Chloroethane	ND		1.0	0.32	ug/L			07/07/15 11:10	1
Chloroform	ND		1.0	0.25	ug/L			07/07/15 11:10	1
Chloromethane	ND		1.0	0.44	ug/L			07/07/15 11:10	1
Chloroprene	ND		2.0	0.26	ug/L			07/07/15 11:10	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			07/07/15 11:10	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/07/15 11:10	1
Dibromochloromethane	ND		1.0	0.43	ug/L			07/07/15 11:10	1
Dibromomethane	ND		1.0	0.42	ug/L			07/07/15 11:10	1
Dichlorodifluoromethane	ND		1.0	0.32	ug/L			07/07/15 11:10	1
Ethyl methacrylate	ND		1.0	0.44	ug/L			07/07/15 11:10	1
Ethylbenzene	ND		1.0	0.25	ug/L			07/07/15 11:10	1
Ethylene Dibromide	ND		1.0	0.32	ug/L			07/07/15 11:10	1
Iodomethane	ND		1.0	0.42	ug/L			07/07/15 11:10	1
Isobutanol	ND		50	12	ug/L			07/07/15 11:10	1
Methacrylonitrile	ND		10	2.5	ug/L			07/07/15 11:10	1
Methyl methacrylate	ND		2.0	0.28	ug/L			07/07/15 11:10	1
Methylene Chloride	ND		1.0	0.33	ug/L			07/07/15 11:10	1
Propionitrile	ND		10	2.0	ug/L			07/07/15 11:10	1
Styrene	ND		1.0	0.45	ug/L			07/07/15 11:10	1
Tetrachloroethene	ND		1.0	0.31	ug/L			07/07/15 11:10	1
Toluene	ND		1.0	0.23	ug/L			07/07/15 11:10	1

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QC Sample Results

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-188119/6

Matrix: Water

Analysis Batch: 188119

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			07/07/15 11:10	1
trans-1,3-Dichloropropene	ND		1.0	0.56	ug/L			07/07/15 11:10	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.55	ug/L			07/07/15 11:10	1
Trichloroethene	ND		1.0	0.22	ug/L			07/07/15 11:10	1
Trichlorofluoromethane	ND		1.0	0.49	ug/L			07/07/15 11:10	1
Vinyl acetate	ND		2.0	0.41	ug/L			07/07/15 11:10	1
Vinyl chloride	ND		1.0	0.29	ug/L			07/07/15 11:10	1
Xylenes, Total	ND		2.0	0.52	ug/L			07/07/15 11:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		78 - 125		07/07/15 11:10	1
4-Bromofluorobenzene (Surr)	95		61 - 120		07/07/15 11:10	1
Dibromofluoromethane (Surr)	93		79 - 120		07/07/15 11:10	1
Toluene-d8 (Surr)	108		80 - 120		07/07/15 11:10	1

Lab Sample ID: LCS 240-188119/4

Matrix: Water

Analysis Batch: 188119

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	10.0	10.2		ug/L		102	80 - 120
1,1,1-Trichloroethane	10.0	9.01		ug/L		90	77 - 123
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	71 - 123
1,1,2-Trichloroethane	10.0	9.94		ug/L		99	80 - 120
1,1-Dichloroethane	10.0	9.16		ug/L		92	79 - 125
1,1-Dichloroethene	10.0	8.14		ug/L		81	76 - 124
1,2,3-Trichloropropane	10.0	11.4		ug/L		114	72 - 126
1,2-Dibromo-3-Chloropropane	10.0	11.2		ug/L		112	50 - 132
1,2-Dichloroethane	10.0	9.16		ug/L		92	80 - 120
1,2-Dichloroethene, Total	20.0	18.0		ug/L		90	80 - 120
1,2-Dichloropropane	10.0	9.21		ug/L		92	78 - 124
1,4-Dioxane	200	144		ug/L		72	56 - 132
2-Butanone	20.0	17.2		ug/L		86	56 - 138
2-Hexanone	20.0	21.2		ug/L		106	55 - 141
3-Chloro-1-propene	10.0	8.04		ug/L		80	69 - 120
4-Methyl-2-pentanone (MIBK)	20.0	18.4		ug/L		92	64 - 135
Acetone	20.0	17.8		ug/L		89	34 - 148
Acrolein	50.0	48.9		ug/L		98	59 - 172
Acrylonitrile	100	90.3		ug/L		90	77 - 126
Benzene	10.0	9.13		ug/L		91	80 - 120
Bromodichloromethane	10.0	9.07		ug/L		91	80 - 120
Bromoform	10.0	8.13		ug/L		81	56 - 122
Bromomethane	10.0	9.04		ug/L		90	38 - 132
Carbon disulfide	10.0	8.24		ug/L		82	65 - 144
Carbon tetrachloride	10.0	9.06		ug/L		91	77 - 131
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	8.47		ug/L		85	36 - 126
Chloroform	10.0	9.21		ug/L		92	80 - 120

TestAmerica Canton

QC Sample Results

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-188119/4

Matrix: Water

Analysis Batch: 188119

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	9.33		ug/L		93	48 - 133
cis-1,2-Dichloroethene	10.0	9.17		ug/L		92	79 - 120
cis-1,3-Dichloropropene	10.0	9.61		ug/L		96	74 - 126
Dibromochloromethane	10.0	9.77		ug/L		98	74 - 120
Dibromomethane	10.0	9.29		ug/L		93	80 - 120
Dichlorodifluoromethane	10.0	5.59		ug/L		56	23 - 136
Ethyl methacrylate	10.0	10.6		ug/L		106	65 - 152
Ethylbenzene	10.0	9.85		ug/L		99	80 - 120
Ethylene Dibromide	10.0	10.3		ug/L		103	80 - 120
Iodomethane	10.0	8.60		ug/L		86	76 - 142
Isobutanol	250	250		ug/L		100	71 - 126
Methylene Chloride	10.0	9.29		ug/L		93	77 - 129
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	80 - 120
o-Xylene	10.0	9.99		ug/L		100	80 - 120
Styrene	10.0	9.52		ug/L		95	76 - 122
Tetrachloroethene	10.0	10.2		ug/L		102	78 - 121
Toluene	10.0	10.4		ug/L		104	80 - 120
trans-1,2-Dichloroethene	10.0	8.87		ug/L		89	80 - 124
trans-1,3-Dichloropropene	10.0	11.7		ug/L		117	75 - 131
trans-1,4-Dichloro-2-butene	10.0	9.20		ug/L		92	29 - 135
Trichloroethene	10.0	9.32		ug/L		93	80 - 121
Trichlorofluoromethane	10.0	5.49	*	ug/L		55	61 - 133
Vinyl acetate	10.0	10.0		ug/L		100	27 - 160
Vinyl chloride	10.0	7.26		ug/L		73	52 - 121
Xylenes, Total	20.0	20.1		ug/L		100	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		78 - 125
4-Bromofluorobenzene (Surr)	97		61 - 120
Dibromofluoromethane (Surr)	95		79 - 120
Toluene-d8 (Surr)	111		80 - 120

TestAmerica Canton

QC Association Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

GC/MS VOA

Analysis Batch: 188119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-52645-1	INFLUENT/062915	Total/NA	Water	8260B	
LCS 240-188119/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-188119/6	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Client Sample ID: INFLUENT/062915

Lab Sample ID: 240-52645-1

Date Collected: 06/24/15 13:30

Matrix: Water

Date Received: 06/30/15 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	188119	07/07/15 12:41	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: EMD Monthly O&M

TestAmerica Job ID: 240-52645-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15 *
Kansas	NELAP	7	E-10336	05-31-15 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15 *
New Jersey	NELAP	2	OH001	09-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15 *
Texas	NELAP	6		08-31-15 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15 *

* Certification renewal pending - certification considered valid.

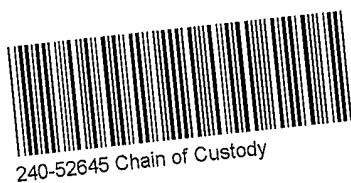
TestAmerica Canton

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



TestAmerica

Temperature on Receipt 2.6103.0

THE LEADER IN ENVIRONMENTAL TESTING

Drinking Water? Yes ☐ No ☐

Client	TRC Environmental	Project Manager	Sim Wasserbauer	Date	6/24/15	Chain of Custody Number	289763
Address	11231 Cornell Pk. Dr	Telephone Number (Area Code)/Fax Number	513-489-2255	Lab Number		Page	1 of 1

City	Cincinnati	State	OH	Zip Code	45242	Site Contact	Dennis Tavis	Lab Contact	Pat Omerny	Analysis (Attach list if more space is needed)	
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Project Name and Location (State)	EMD Monthly Oins	Carrier/Maybill Number	TA CWCY	098	098	Special Instructions/
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Contract/Purchase Order/Quote No.	Matrix	Containers & Preservatives	Conditions of Receipt
76975			

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Unknown ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
 Turn Around Time Required _____ QC Requirements (Specify) _____
 (A fee may be assessed if samples are retained longer than 1 month)

<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other	50
1. Relinquished By						Time
1. Received By						Date
1. Received By						Date

2. Relinquished by	Date	Time	2. Received by	Date	Time
<i>[Signature]</i>	024/13	14:35	<i>[Signature]</i>	0129/15	14:35

3. Relinquished By	Date	Time	3. Received By	Date	Time
	11/24/15	14:40		6-30-15	8:50

Comments	

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

TestAmerica Canton Sample Receipt Form/Narrative		Login #: <u>52445</u>	
Canton Facility _____			
Client <u>TRC</u>		Site Name _____	
Cooler Received on <u>6-30-15</u>		Opened on <u>6-30-15</u>	
FedEx: 1 st <input checked="" type="checkbox"/> <u>Grd</u> Exp		UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____	
Receipt After-hours: Drop-off Date/Time _____		Storage Location _____	
TestAmerica Cooler # _____		Foam Box <input checked="" type="checkbox"/> Client Cooler Box Other _____	
Packing material used: <u>Bubble Wrap</u>		Foam Plastic Bag None Other _____	
COOLANT: <u>Water</u>		<u>Blue-Ice</u> <u>Dry Ice</u> <u>Water</u> <u>None</u>	
<p>1. Cooler temperature upon receipt</p> <p>IR GUN# A (CF +1.0 °C) Observed Cooler Temp. <u>2.6</u> °C Corrected Cooler Temp. <u>3.6</u> °C</p> <p>IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C</p> <p>IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C</p> <p>IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C</p> <p>2. Were custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u> <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>-Were custody seals on the outside of the cooler(s) signed & dated? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> NA</p> <p>-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Shippers' packing slip attached to the cooler(s)? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>4. Did custody papers accompany the sample(s)? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>5. Were the custody papers relinquished & signed in the appropriate place? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>6. Was/were the person(s) who collected the samples clearly identified on the COC? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>7. Did all bottles arrive in good condition (Unbroken)? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>8. Could all bottle labels be reconciled with the COC? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>9. Were correct bottle(s) used for the test(s) indicated? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>10. Sufficient quantity received to perform indicated analyses? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>11. Were sample(s) at the correct pH upon receipt? Yes No <input checked="" type="checkbox"/> NA pH Strip Lot# <u>HC432654</u></p> <p>12. Were VOAs on the COC? <input checked="" type="checkbox"/> Yes No <input type="checkbox"/> No</p> <p>13. Were air bubbles >6 mm in any VOA vials? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA</p> <p>14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No</p>			
<p>Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____</p> <p>Concerning _____</p>			

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by: _____
<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>	
15. SAMPLE CONDITION	
Sample(s) _____ were received after the recommended holding time had expired.	
Sample(s) _____ were received in a broken container.	
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)	
16. SAMPLE PRESERVATION	
Sample(s) _____ were further preserved in the laboratory.	
Time preserved: _____ Preservative(s) added/Lot number(s): _____	